

第1の物体～第1面の距離: 83.739mm

i	r _i	d _i	s _i
1	989.397	18.000	1.56000
2	-3595.508	1.697	
3	735.000	24.359	1.56000
4	2482.140	300.511	
5	-114.548	18.000	1.56000
6	-946.909	7.879	
7	-185.804	-7.879	M 1
8	-945.909	18.000	1.56000
9	-114.548	-285.911	
10	1428.822	324.390	M 2
11	380.000	48.405	1.56000
12	-345.892	434.726	
13	182.420	18.000	1.56000
14	225.926	46.944	
15	0.0(stop)	21.343	
16	2231.779	28.288	1.56000
17	-232.971	1.000	
18	68.389	22.403	1.56000
19	275.504	1.000	
20	139.927	19.297	1.56000
21	275.724	5.771	
22	-963.793	27.452	1.56000
23	-228.789	1.000	
24	106.934	18.000	1.56000
25	-742.488		

aspherical surfaces

i	K	A	B	C	D
2	0.000000e+000	3.268074e-003	-6.656739e-012	1.084352e-016	-1.428501e-020
4	0.000000e+000	-5.945159e-003	9.367805e-012	-3.575072e-016	1.878106e-020
5	0.000000e+000	-1.045454e-003	9.094085e-013	4.544093e-017	6.202292e-019
7	0.000000e+000	-1.020398e-003	-2.127267e-013	-2.970763e-017	1.035495e-019
9	0.000000e+000	-1.045454e-003	9.054085e-013	4.544093e-017	6.202292e-019
12	0.000000e+000	1.276944e-003	-3.269379e-014	-1.148753e-018	1.871030e-022
13	0.000000e+000	-1.177280e-007	-9.735382e-012	-6.058584e-016	-7.794080e-020
16	0.000000e+000	7.415847e-003	-1.533594e-011	2.908683e-015	-1.312466e-019
18	-2.785242e-001	-4.548406e-003	8.093119e-012	-1.712233e-015	-2.128524e-018
20	-3.452390e+000	-1.167411e-007	-3.193404e-011	-1.695026e-015	3.938837e-018
22	0.000000e+000	1.441332e-007	1.075541e-011	8.325199e-015	-6.884476e-018
24	-5.837671e-001	-2.497358e-007	-8.672718e-011	-1.119861e-014	-1.058546e-017

i	E	F	G
2	2.505755e-024	-9.840953e-029	0.000000e+000
4	-1.827522e-024	7.013708e-029	0.000000e+000
5	-1.963400e-022	2.718627e-026	0.000000e+000
7	-2.877088e-023	3.146892e-027	0.000000e+000
9	-1.963400e-022	2.718627e-026	0.000000e+000
12	-9.175707e-027	1.629370e-031	0.000000e+000
13	1.160368e-023	-1.219551e-027	0.000000e+000
16	-2.537773e-022	5.424698e-026	0.000000e+000
18	3.623462e-022	-1.873086e-025	0.000000e+000
20	2.639407e-022	-5.908244e-026	0.000000e+000
22	7.408468e-021	-4.889248e-025	0.000000e+000
24	1.061653e-020	-1.104395e-023	0.000000e+000

第1の物体～第1面の距離: 75.685mm

i	ri	di	ai
1	297.627	19.775	1.56000
2	-1115.686	328.484	
3	-100.540	18.000	1.56000
4	2147.160	22.180	
5	-203.139	-22.180	
6	2147.160	-18.000	1.56000
7	-160.540	-313.164	
8	0.000	365.344	M 1
9	1049.329	38.055	M 2
10	-387.846	1.000	
11	180.260	45.524	1.56000
12	634.071	129.149	
13	249.471	18.000	1.56000
14	127.136	325.385	
15	0.0 (stop)	1.000	
16	234.780	33.014	1.56000
17	-336.281	1.000	
18	144.606	35.000	1.56000
19	908.634	16.804	
20	-793.316	35.000	1.56000
21	-100.000	1.000	
22	85.351	25.000	1.56000
23	0.000		

aspherical surfaces

i	X	A	B	C	D
1	0.000000e+000	1.372961e-008	3.473252e-013	-3.195720e-016	8.094243e-020
2	0.000000e+000	2.151239e-008	9.541848e-012	4.776884e-016	7.380866e-020
3	0.000000e+000	4.532898e-009	1.623606e-012	1.222871e-016	1.631434e-020
4	0.000000e+000	2.151239e-008	9.541848e-012	4.776884e-016	7.380866e-020
5	0.000000e+000	6.040814e-010	2.625973e-013	-1.989714e-017	8.422664e-022
6	0.000000e+000	-5.072499e-009	1.389858e-013	-1.647184e-017	3.468047e-022
7	0.000000e+000	3.313157e-008	2.180614e-012	3.887404e-016	-3.918557e-020
8	0.000000e+000	1.8588529e-007	1.966297e-013	2.828536e-015	2.203369e-019
9	0.000000e+000	-1.661572e-007	-3.379925e-011	7.374553e-019	-5.503265e-019
10	0.000000e+000	-4.993819e-009	7.733187e-012	-2.042203e-016	3.693495e-020
i	E	F	G		
1	-1.434764e-023	1.206655e-027	-4.210407e-032		
2	2.063590e-023	4.815958e-027	-5.593776e-031		
3	-8.711867e-025	2.364757e-028	1.525109e-033		
4	2.063590e-023	4.815958e-027	-5.593776e-031		
5	-2.700833e-026	4.650685e-031	-4.252218e-036		
6	3.873194e-028	-2.799981e-031	4.425878e-037		
7	1.130858e-023	-1.107497e-027	6.450322e-032		
8	1.188890e-022	-2.652801e-026	7.612208e-030		
9	1.402877e-023	2.115981e-027	-8.027962e-031		
10	-2.303114e-022	-5.209629e-026	5.804270e-030		

【0081】

【表3】(実施例3)

第1の物体～第3面の距離 : 72.674

i	ti	di	ri
1	-593.057	25.376	1.56000
2	-320.774	1.000	
3	463.082	27.632	1.56000
4	-613.951	281.857	
5	-109.749	18.080	1.56000
6	-961.687	9.159	
7	-173.361	-9.159	M 1
8	-981.687	-18.080	1.56000
9	-109.749	-266.071	
10	1622.171	305.230	M 2
11	-1560.554	24.024	1.56000
12	-385.738	1.000	
13	347.111	47.000	1.56000
14	-1881.170	410.002	
15	8178.687	28.178	1.56000
16	-212.848	75.849	
17	0.0(stop)	15.536	
18	268.041	33.816	1.56000
19	-186.462	1.000	
20	87.102	20.173	1.56000
21	350.670	1.000	
22	186.470	21.218	1.56000
23	86.136	6.639	
24	188.946	20.602	1.56000
25	-186.509	1.000	
26	105.783	20.915	1.56000
27	-743.988		

aspherical surfaces

i	K	A	B	C	D
2	-7.252380e+000	-4.701121e-009	-6.090134e-013	-1.287089e-017	8.029170e-022
4	0.000000e+000	-4.766887e-009	2.462294e-012	-9.893034e-017	6.719603e-021
5	0.000000e+000	2.115808e-009	-1.611319e-013	1.025091e-015	5.091150e-019
7	0.000000e+000	-6.712584e-009	-8.093063e-013	2.987582e-017	5.879124e-020
9	0.000000e+000	2.115808e-009	-1.611319e-013	1.025091e-015	5.091150e-019
10	0.000000e+000	7.054971e-010	2.418241e-014	1.823107e-018	7.963029e-023
12	0.000000e+000	4.701819e-009	-2.189427e-014	1.873642e-018	-1.066343e-023
13	0.000000e+000	8.092928e-010	-5.294695e-014	1.484461e-018	1.873403e-023
15	0.000000e+000	-1.344505e-007	1.853632e-012	1.650439e-016	-1.066371e-020
18	5.860213e+000	2.805319e-008	-5.963359e-011	5.837059e-017	8.483480e-019
20	-5.463452e-001	-1.335770e-007	-8.743479e-013	4.818352e-015	2.569221e-020
22	-1.401348e+000	-4.899955e-008	2.339115e-011	-1.459818e-014	-1.877957e-018
24	0.000000e+000	3.153044e-007	-8.376396e-012	1.928347e-014	5.705932e-018
26	6.648275e-001	-1.189888e-007	6.781855e-012	-1.430239e-014	3.880028e-018
i	E	F	G		
2	-4.085485e-025	1.824786e-029	0.000000e+000		
4	-2.271393e-025	1.177205e-030	0.000000e+000		
5	-1.657547e-023	6.847636e-027	0.000000e+000		
7	-1.029026e-023	8.654758e-028	0.000000e+000		
9	-1.657547e-023	6.847636e-027	0.000000e+000		
10	4.433871e-023	2.201312e-032	0.000000e+000		
12	-2.055745e-027	5.118720e-032	0.000000e+000		
13	-3.513181e-027	7.675071e-032	0.000000e+000		
15	-1.436354e-025	-9.35157e-030	0.000000e+000		
18	-2.758585e-022	2.003196e-026	0.000000e+000		
20	-2.770624e-022	-8.035715e-026	0.000000e+000		
22	1.983183e-021	-1.380384e-025	0.000000e+000		
24	-4.390899e-023	6.267086e-026	0.000000e+000		
26	3.573881e-021	2.151859e-025	0.000000e+000		

第1の物体～第1面の距離: 81.211

i	r _i	d _i	n _i
1	2240.555	47.000	1.56000
2	-312.927	1.000	
3	209.677	34.603	1.56000
4	-314.137	150.769	
5	-819.717	-140.769	M 1
6	277.686	889.917	
7	1806.318	19.445	1.56000 M 2
8	-583.025	1.000	
9	0.0(stop)	73.850	
10	197.078	35.504	1.56000
11	879.377	1.000	
12	126.409	28.494	1.56000
13	162.675	98.900	
14	121.885	21.038	1.56000
15	905.776		

aspherical surfaces

i	K	A	B	C	D
2	0.000000e+000	3.706794e-008	-5.144019e-012	6.973326e-017	-7.330938e-021
4	0.000000e+000	3.878903e-009	7.795334e-012	-6.781754e-016	5.265168e-020
5	0.000000e+000	8.445174e-009	3.143938e-011	-2.614011e-014	2.088089e-017
6	0.000000e+000	-2.863861e-009	-5.305438e-015	1.717130e-018	-3.511472e-023
7	0.000000e+000	-3.549063e-009	-1.408264e-013	1.931760e-019	5.091573e-023
10	0.000000e+000	-5.841939e-009	-2.405096e-013	4.288890e-018	-7.434790e-022
12	0.000000e+000	-5.913583e-009	-4.340165e-014	-1.651705e-017	-1.294285e-022
14	0.000000e+000	-8.534527e-008	-8.202426e-012	-7.411706e-016	-1.255473e-020
i	E	F	G		
2	7.818988e-025	-1.099803e-029	0.000000e+000		
4	-3.124244e-024	7.960469e-029	0.000000e+000		
5	-1.054713e-020	2.300997e-024	0.000000e+000		
6	-1.813806e-028	5.037276e-032	0.000000e+000		
7	-4.316781e-027	8.877331e-032	0.000000e+000		
10	2.311772e-020	-5.842989e-031	0.000000e+000		
12	1.623655e-026	-3.143454e-030	0.000000e+000		
14	-2.566756e-024	-3.831608e-028	0.000000e+000		

【0083】

【表5】(実施例5)